

PREPARED STATEMENT OF PATRICIA A. GRADY, PH.D., RN, FAAN DIRECTOR,
NATIONAL INSTITUTE OF NURSING RESEARCH

Mr. Chairman and Members of the Committee: I am pleased to present the President's Fiscal Year (FY) 2017 Budget request for the National Institute of Nursing Research (NINR) of the National Institutes of Health (NIH).

INTRODUCTION

The mission of NINR is to promote and improve the health of individuals, families, and communities. We achieve this mission by supporting research to: promote health and prevent disease; advance symptom science to develop personalized health strategies; enhance self-management of chronic conditions; improve end-of-life and palliative care; develop new technologies to improve health; and train nurse scientists. This year, we are pleased to commemorate NINR's 30th anniversary, which provides an opportunity to reflect on many of the accomplishments being made every day by nurse scientists across the Nation. In October 2015, NINR hosted the first in a series of scientific events to highlight significant contributions of nursing science for improving health. As we envision the next 30 years, we are confident that NINR's support of nursing research will continue to improve the lives of diverse individuals, families, and communities across the life span. I am grateful for this opportunity to share with you some examples of the innovative research that NINR supports.

IMPROVING THE HEALTH OF CHILDREN AND ADOLESCENTS

Chronic conditions such as asthma, obesity, and diabetes have the potential to negatively affect the quality of life of children and adolescents. NINR-supported scientists are addressing this issue by developing innovative interventions to increase positive health outcomes in children. NINR-supported researchers demonstrated the effectiveness of a school-based healthy lifestyles program for overweight/obese and depressed teens. Results showed that a year after completing the program, there was a significant decrease in the proportion of overweight and obese students, and students who had begun the program with severely elevated depressive symptoms had significantly lower depression.

NINR maintains its commitment to support research to improve health for children from vulnerable groups who are often disproportionately affected by chronic conditions. One recent NINR-supported study showed improvements in asthma episode management and prevention behaviors in medically underserved, inner-city school-age students who received a school and community based asthma health education and counseling program. In other ongoing efforts, NINR-supported investigators are testing a community-based participatory intervention aimed at American Indian/Alaska Native teens and their mothers to raise awareness of the risks of gestational diabetes mellitus, promote a healthy lifestyle, and prevent subsequent development of type 2 diabetes.

MAINTAINING HEALTH IN OLDER ADULTHOOD

In light of our rapidly aging population, it is more important than ever to support efforts to prevent chronic illness early in life and to promote active lifestyles, health, and independence as people age. One promising area of research focuses on developing new technologies to improve and maintain physical mobility for older adults. For example, NINR-supported researchers designed an innovative unpowered ankle exoskeleton that harnesses the power of a person's own muscles to make walking more efficient. Although scientists are still developing and testing the exoskeleton, it has the potential to make walking easier for people recovering from an injury or dealing with normal aging issues. Another recent NINR-led initiative focuses on development of technological and biobehavioral interventions to help persons with dementia or cognitive impairment maintain independence and quality of life, as well as to reduce stress and burden on caregivers. NINR-supported researchers are also uncovering complex relationships among biological, physical, and behavioral factors that may play a role in depressive symptoms in older adults. A recent study revealed that mutations in a gene known to be related to depression, as well as pain, fear of falling, and low physical activity, were all associated with depressive symptoms in older adults. NINR is also leading an initiative to support prevention research in mid-life adults, which will inform efforts to optimize health and wellness as people age.

ENHANCING END-OF-LIFE AND PALLIATIVE CARE

As the lead NIH Institute for end-of-life research, NINR supports research to identify the most effective strategies to ease the symptoms of advanced illness and to assist families in making difficult end-of-life decisions. In an effort to build the science of end-of-life and palliative care, we continue to support a palliative care research cooperative (PCRC), which brings together multidisciplinary researchers from universities, health systems, hospices, and hospitals across the United States. Recent findings from research supported by the PCRC revealed that discontinuing statin medication use in patients with advanced illness is safe and may increase quality of life, decrease the use of non-statin medications, and reduce costs. In 2015, NINR launched the second phase of NINR's Palliative Care: Conversations Matter® initiative, which focuses on children, parents, and families, and includes a new brochure, in English and Spanish, to help raise awareness of the benefits of palliative care. NINR also is leading a new initiative to support research to better understand the unique perspectives, needs, wishes, and decision-making processes of youth living with serious illnesses and their families, and to enhance their quality of life.

LOOKING TOWARD THE FUTURE: NURSE SCIENTISTS

One of NINR's fundamental goals is to develop the next generation of nurse scientists to address the Nation's most pressing health issues. NINR offers a variety of training opportunities to nurse scientists and trainees at all career levels, and recognizes the importance of supporting new investigators whose success is so critical to the future of innovative research and high-quality health care. In order to build a scientific workforce that is innovative, diverse, and ready for the future, NINR's training programs provide nurse scientists with the skills and tools to support continued advancements in science and improvements in health. For example, in 2015,

NINR sponsored our second Big Data Research Boot Camp at NIH, a week-long intensive training that provides a foundation in big data science methodologies and strategies for incorporating new methods to strengthen research proposals. NINR's Summer Genetics Institute is an intensive program for graduate students, faculty, and clinicians designed to provide a foundation in molecular genetics to improve research and clinical practice.

CONCLUSION

Thank you for this opportunity to share some of NINR's accomplishments and the important work being done every day by nurse scientists across the country. NINR will continue to support innovative research to improve health now and in the future.

Patricia A. Grady, Ph.D., RN, FAAN
Director, National Institute of Nursing Research

Dr. Patricia A. Grady was appointed Director of the National Institute of Nursing Research (NINR) at the National Institutes of Health (NIH) in 1995. She earned her undergraduate degree in nursing from Georgetown University, and pursued her graduate education at the University of Maryland, receiving a master's degree from the School of Nursing and a doctorate in physiology from the School of Medicine.

An internationally recognized researcher, Dr. Grady's scientific focus has been primarily in stroke, with emphasis on arterial stenosis and cerebral ischemia. She is a member of several distinguished scientific organizations, including the National Academy of Medicine (formerly the Institute of Medicine) of the National Academies, Society for Neuroscience, American Academy of Nursing, and American Neurological Association. She also is a fellow of the American Stroke Association.

Before coming to NIH, Dr. Grady held several academic positions and served concurrently on the faculties of the University of Maryland School of Nursing and School of Medicine. In 1988, Dr. Grady joined NIH as an extramural research program administrator in the National Institute of Neurological Disorders and Stroke (NINDS) managing the areas of stroke and brain imaging. Two years later, she served on the NIH Task Force for Medical Rehabilitation Research, which established the first long-range research agenda for the field of medical rehabilitation research. In 1992, she assumed the responsibilities of NINDS Assistant Director and, from 1993 to 1995, she was Deputy Director and Acting Director of NINDS. Dr. Grady served as a charter member of the NIH Warren Grant Magnuson Clinical Center Board of Governors.

Dr. Grady has authored or co-authored numerous published articles and papers on hypertension, cerebrovascular permeability, and arterial stenosis. She is an editorial board member of the major stroke journals. Dr. Grady lectures and speaks on a wide range of topics, including future directions in nursing research, developments in the neurological sciences, and Federal research opportunities.

Dr. Grady has been recognized with several prestigious honors and awards for her leadership and scientific accomplishments. She was the first awardee of the Centennial Achievement Medal from the Georgetown University School of Nursing and Health Sciences, and she was named the inaugural Rozella M. Schlotfeld distinguished lecturer at the Frances Payne Bolton School of Nursing at Case Western Reserve University and received the honorary degree of Doctor of Public Service from the University of Maryland. In 2005, Columbia University School of Nursing honored Dr. Grady with its prestigious Second Century Award for Excellence in Health Care. During that same year she also received Doctor of Science, *Honoris Causa*, degrees from Thomas Jefferson University and the Medical University of South Carolina. Recently, Dr. Grady was named one of the top 100 Most Powerful Women in Washington. She is a past recipient of the NIH Merit Award and received the Public Health Service Superior Service Award for her exceptional leadership.